

TX Teacher Certification: Implications for students, principals, and programs



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Agenda

- REDEE Center—Who are we?
- Teacher Certification in TX –landscape
- Teacher Certification, Assignment (teaching Out-of-Field OOF) & Student Achievement

REDEE Center Established 2020 by Dr. Jim VanOverschelde & Dr. Minda Lopez

- Research for EDucator Equity & Excellence Center
 - Pronounced Ready
- Conduct research on:
 - Educator preparation pipeline from teacher candidate to teaching expert
 - Teacher employment and student learning environments
 - Student achievement and equitable access to high quality education
- Critical Quant, Qual, and Mixed methods

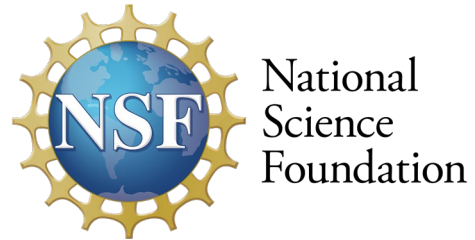
REDEE Center

Goals

1. Improve educator preparation programs
2. Increase diversity and effectiveness of new educators
3. Advance p-12 student achievement
4. Inform state & federal policies and accountability
5. Improve the lives of teachers and students

Funding

BILL & MELINDA GATES *foundation*



REDEE Database

Contains:

- All P-12 students, teachers, principals, employees
- Linkage for students to teachers in particular classes
 - Half billion student -course-teacher records
- Teacher licensure records
- Teacher preparation data

Texas Context – Part 1 -- Teachers

- 5.8 million P-12 students
- 372k teachers (largest # of any US State)
 - 50-60k teachers leave teaching each year (18%)
 - 1 in 9 teachers left the profession at the end of 2021
 - Prepare 2025k per year
 - 2535k shortage per year
 - Hire more than 40k per year

Texas Context – Part 2 -- Preparation

- **Traditional (Degree-based) TPP**
 - IHE, UG/GR
 - ~20% of new teachers trained this way
 - Predominately white and female

Texas Context – Part 2 -- Preparation

- **Alternative (Non-degreebased) aka Inservice TPP**
 - IHE, for-profit, non-profit, school district, education service center
 - ~30% of new teachers
 - Texas prepares 50% of ALL alternatively prepped teachers in U.S.
 - ~60% of all new licensed teachers were alternatively prepared
 - 78% of Black teachers, 54% of Latiné, 63% of Other ethnicity
 - 71% of all male teachers

Texas Context – Part 2 -- Preparation

- **No preparation**
 - ~50% of new teachers

Texas Context – Shortages (2023-24)

All levels –

- Bilingual/English as a Second Language
- Computer Science/Technology
- Special Education

Secondary –

- CTE
- ELA/Reading
- Mathematics
- Science
- Social Studies

Out of Field (OOF) Teacher Assignment

Van Overschelde & Piatt, 2020

- Used state rules to classify secondary teachers
 - In-field or OOF
- Data from 201-12 through 201-18
- 15.4 million records

Secondary Subjects Most Taught OOF

Rank by #	Subject	# of classes	Percentage OOF	Number OOF
1.	ELA	2,121,281	26.7	566,382
2.	Math	2,058,826	24.4	502,353
3.	P.E.	1,295,166	34.6	448,127
4.	History	1,166,007	31.3	364,960
5.	Spanish	756,989	34.6	261,918
6.	Music	634,204	5.0	31,710
7.	Science	569,907	19.3	109,992
8.	Art	499,964	14.7	73,494
9.	Biology	445,755	24.4	108,764
10.	Geography	380,817	30.9	117,672

Secondary –

- CTE
- ELA/Reading
- Mathematics
- Science
- Social Studies

Highest shortage/need

Teacher Assignment

- Strongest predictor of teacher assigned OOF
 - Alternatively prepared
- Assignment to OOF higher with
 - Black teachers
 - Male teachers
 - Rural schools
 - Lower pedagogy test scores
- Exponential increase since ESSA, DOI

Student Assignment

- Students take classes taught OOF more often when
 - Black
 - Male
 - Low income
 - Special Education
 - Emergent bilingual
 - Enrolled in rural schools
- Not equitable assignment per ESSA

Teaching OOF – So What?

Students learn less, show less growth when taught OOF

- Clotfelter, Ladd, & Vigdor, 2010
 - In-field versus No license
- Dee & Cohodes, 2008
 - American national exam sample
- Goldhaber & Brewer, 2000
 - American national exam sample
- BUT, tests not directly aligned with curriculum

Teaching OOF in English

López, VanOverschelde & Saunders, 2024 (R&R)

- Three-level Value-added modeling (1. students, 2. teachers, 3. schools)
- Teachers
 - TPP-licensed-5460%
 - Test-licensed-1419%
 - Intern-licensed- 1011%
 - OOF -licensed-1519%
- Accounted for
 - years teaching & years teaching course
 - student demographic & prior performance
 - school locale (e.g., urban, rural) & student body

Research Questions

- 1) Does teaching OOF impact student achievement/growth in English and Math?
- 2) Does teacher preparation subject matter?
- 3) How many years of experience are required to eliminate the negative impact on student learning of teaching OOF?

Licensure	Description
TPP Licensed -- Fully prepared and licensed in that subject	<p>Teacher who was trained in a teacher preparation program and graduated, fully licensed in the subject they are teaching.</p> <p>[ITE training, licensure and subject teaching all match]</p>
Test-licensed	<p>Teacher who is licensed in another subject; prepared for and passed the licensure test in the subject they are currently teaching (ie. licensed in History, prepared for and passed licensure test in English)</p> <p>[Did not get licensed through an ITE in the subject currently teaching but prepared for and passed licensure test for subject currently teaching]</p>
Intern-licensed	<p>Teacher who is not yet licensed and is in their initial teacher training and is considered the teacher of record at the same time (usually year 1 and/or 2 of teaching).</p> <p>[In service teacher candidates in their ITE in subject they are teaching]</p>
Out-of-field (OOF)	<p>Licensed teacher who is teaching a class that is mismatched from teacher's qualifications (ie licensed in History but teaching English).</p> <p>[Licensed in an ITE in another subject; did not prepare and pass licensure in the subject currently teaching]</p>

Sample— statewide from fall 2011-spring 2018

Students (n)

English

Grade 10	1,660,693
Grade 9	1,778,308
Grade 8	1,734,412
Grade 7	1,786,012

Math

Grade 8/9	1,750,027
Grade 8	1,376,783
Grade 7	1,712,551

Study 1–English OOF Deficit

OOF-License

Grade 10	29.1 Years
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Grade 9	12.1 Years
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Grade 8	10.6 Years
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Grade 7 w/essays	9.7 Years
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English Results

- OOF-license < TPL license
 - Grade 10 ELAR: 10.1% SD lower, 1.3x poverty
 - Grade 9 ELAR: 9.2% SD lower, equal to poverty
 - Grade 8 ELAR: 3.7% SD lower, 50% of poverty
 - Grade 7 ELAR w/Essays: 2.4% SD lower, 30% of poverty
- Interns \geq Test in most subjects
- Experience teaching and Experience teaching course are moderately correlated ~ 0.40

Study 2–Math OOF Deficit

OOO-License

Grade 8/9 Math	23.9 Years
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Grade 8 Math	22.3 Years
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Grade 7 Math	12.1 Years
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Summary of Results

- Effectiveness varies widely by preparation type
- Licensed teachers are most effective Year 1
- Preparing for and passing licensure test impacts effectiveness

- Licensed Interns assigned to teach OOF more
- OOF teaching is harmful for students

Unprecedented times in teacher licensure

- 90% of Texas districts are exempt from teacher licensure requirements
- 50% of 32,519 new teachers were unlicensed in ~~2022~~ 2022
- 68% unlicensed in rural communities
 - Up from 18% just 10 years ago

TPP Accountability & Role

- TPPs in Texas are held accountable for student growth
 - Regardless of principal assignment of teachers
- Equitable system must consider OOF teaching assignments
- How can we as TPPs help teachers be more effective despite this wild west context of licensure?
 - Can we offer differentiated training, microcredentials, programs for teachers to be fully licensed in multiple content areas?

Key Takeaways

- Deregulation of Texas education as it stands now is harming students
 - Especially SOC, low income, rural, special education, EB, lower performers
- Standards for clinical teaching matter
 - Inservice standards are too low
- Hiring unlicensed instructors is more expensive in long run
 - 60-70% leave within 3 years

Next Steps...

- Examine impacts of new teachers in English
- Examine DOI in detail
 - How districts are using exemption versus initial, approved DOI plan
- Examine impacts of Residency versus Student Teaching

- And so much more to do!

Contact Information

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